BOSS AUDIO SYSTEMS

S10A
800W 10-Inch Amplified Subwoofer

S12A
1200W 12-Inch Amplified Subwoofer

Congratulations on your purchase of a BOSS AUDIO SYSTEMS Amplified Subwoofer.

It has been designed, engineered and manufactured to bring you the highest level of performance and quality, and will afford you years of listening pleasure.

Thank you for making BOSS AUDIO SYSTEMS your choice for car audio entertainment!

USER'S MANUAL

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Introduction

This new BOSS AUDIO SYSTEMS series includes two high-power amplified subwoofers.

Each system features a built-in MOSFET monoblock amplifier in a custom-designed enclosure with a preloaded woofer. The speaker system is specially-designed to provide maximum performance with this amplifier.

The amplifier section of your new subwoofer system features a variable low pass crossover and and a variable input gain control. A +18dB Bass Boost selector is been included on both amplifiers. Time alignment can be improved by using the built-in Phase Selector. You can control the subwoofer level with the remote level control module.

Since some users will use this with just a head unit and others will use it to supplement an independently amplified system, we have included both RCA (low level) inputs and speaker (high-level inputs).

BOSS AUDIO SYSTEMS understands that amplifiers are placed in many different kinds of installations, so we incorporated a very flexible system of controls in these amplifiers in order to help you integrate the amp into your system regardless of the nature of your input source.

What is included?

When first unpacking your new enclosure system, please check first that the package contains all of the items below. If something is missing, contact the store where you purchased the amplifier.

- **Amplified subwoofer**
- **Remote level control and cable**
- **High input cable with connector**

Features

Your new amplified subwoofer system features the following:

- **Class A-B operation**
- **MOSFET PWM (Pulse Width Modulated) Power Supply**
- **Thermal and speaker short protection**
- **Soft turn-on circuit**
- **Remote turn-on/turn-off circuit**
- **Variable input gain control**
- **Variable low pass crossover**
- **Selectable 0 or +18dB Bass Boost**
- **Gold-plated RCA low level and high level inputs**
- **Bi-color (green/red) LED power/protection indicator**
- **Remote subwoofer level control**

Your new subwoofer enclosure features the following:

- **Bass reflex, ported design**
- **Quality MDF construction**
- **Rugged, scuff-resistant black finish**
- **Dual chrome plated protector bars for the woofer**

Your new subwoofer features the following:

- **Engraved, metallic injection cone**
- **Deep, custom-tooled protective rubber trim gasket**
- **Butyl rubber surround**
- **Stamped steel basket**
- **Single voice coil design**

General precautions

Before installing and using your new BOSS AUDIO SYSTEMS amplified subwoofer enclosure, please become familiar with all the information contained in this manual. Please keep this manual in a safe place for future reference.

• Do not open or attempt to repair this unit yourself. Dangerous high voltages are present which may result in electric shock. Refer any repairs to a qualified service technician.

• To avoid risk of electronic shock or damage to the amplifier, do not permit any of this equipment to become damp or wet from water or drinks. If this does occur, immediately unplug the power wires and send the amplifier to your local dealer or service center as soon as possible.

• If there is smoke or any peculiar odor present during use or if there is damage to any of the component enclosures, immediately unplug the power wire and send the amplifier to your local dealer or service center as soon as possible .

Installation precautions

Before you drill or cut any holes, investigate your car's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

Never operate the amplified subwoofer when it is unmounted. Attach all audio system components securely to prevent damage, especially in an accident.

Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by the manufacturer's warranty.

Mounting the amplifier

1. Find a suitable location in the vehicle in which to mount the amplifier.

2. Make sure there is sufficient air circulation around the intended mounting location.

3. Mark the location for the mounting hole screws by positioning the amplifier where you wish to install it. Use a scribe or mounting screw, inserted through each of the amp's mounting holes, to mark the mounting surface. If the mounting surface is carpeted, measure the hole centers and mark with a felt tip pen.

4. Drill pilot holes in the mounting surface for the mounting screws. Place the amplifier in position, and attach the amplifier to the mounting surface securely using screws.

SHOCK HAZARD! Do not open the case of this product. There are dangerous voltages present within the unit. There are no user-serviceable parts within the unit.

Mounting the sub enclosure

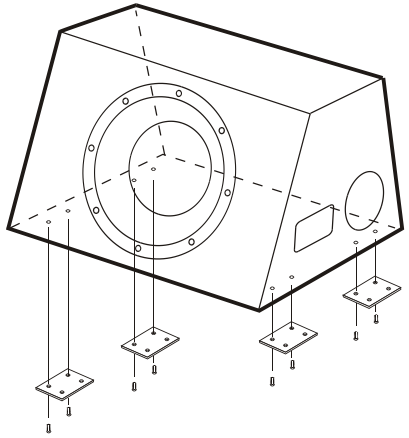
IMPORTANT! Mount the subwoofer securely in your vehicle. Proper securing of this large, heavy enclosure is an important and vital part of the installation in order to prevent injury or damage to your vehicle should your vehicle be involved in a motor accident.

Since every vehicle is different, each installation varies and requires careful consideration of how to secure the enclosure.

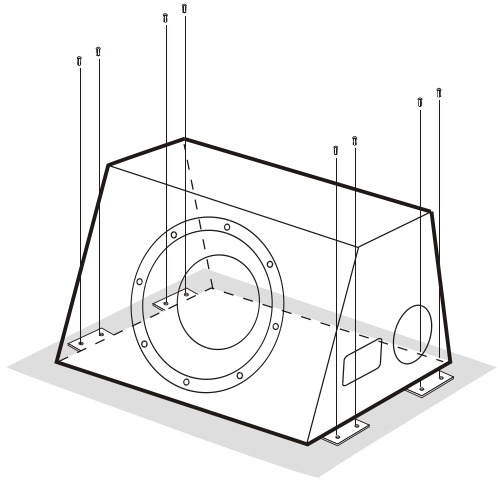
In general, we recommend using some form of metal mounting brackets or plates, which are available at most hardware stores. These will enable you to bolt the unit down to a solid surface in your vehicle. Some suggested installation methods appear on this page.

Before you drill or cut any holes, investigate your car's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

Suggested mounting method #1



1. Attach metal plates (not included) to *bottom* of enclosure using wood screws.



2. Attach metal plates (not included) to mounting surface in vehicle using self-tapping sheet metal screws.

Don't penetrate the enclosure cabinet!

The enclosure cabinet is made of material 1/2" (12.5mm) thick. Please keep this in mind when attaching brackets to the cabinet and choose screws that are not long enough to penetrate the enclosure.

Connecting the amplifier panel

Before doing any wiring, look through this manual and identify the diagrams to follow for power, input and speaker connections for your particular installation. Be sure you understand all the connections before you proceed.

1. Connect the power ground terminal to the closest point on the chassis of the car. Keep this ground wire to less than 39" (100 cm) in length. Use 8 gauge (or heavier) wire.

2. Connect the remote terminal to the remote output of the head unit using 16 gauge (or heavier) wire.

3. Connect an empty fuse holder within 18" (45 cm) of the car battery, and run 8 gauge (or heavier) cable from this fuse to the amplifier panel location.

4. Check that the fuse holder is empty. Then connect the fuse holder to the "BATT+" connection on the amplifier.

5. If multiple amplifiers and/or amplified subwoofers are being used in your system, either:

• Run a separate pair of cables from the battery and a chassis ground point to each amplifier and amplified subwoofer. Each (+) cable must have its own inline fuse.

-or-

• Run a #4 cable from the fuse holder at the battery to a distribution block at or near the location of each amplifier or amplified subwoofer. Then run separate cables from the amplifier/amplified subwoofer to this distribution block and to independent chassis ground points.

6. Connect all line inputs and outputs (if used) using high-quality cables. Connect all speakers, following the diagrams in this manual. Be sure to observe proper polarity to avoid audio phase problems.

7. Insert fuse(s) into the battery fuse holder(s).

8. Recheck all connections before powering up the amplified subwoofer.

9. Set all level controls to minimum position, and set all crossover controls/switches to the desired frequency points.

10. Power up the head unit and the amplified subwoofer. Then set the volume control on the head unit to about 3/4 volume, and adjust the amplifier's input level control to just below the level of distortion.

11. Further fine tuning of the various controls may be necessary to obtain best results.

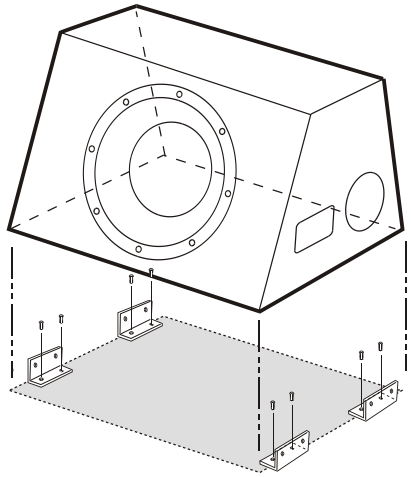
Don't misuse the level control!

Do not mistake the input level control for a volume control! It is designed ONLY to match the output level of your audio source to the input level of your amplifier.

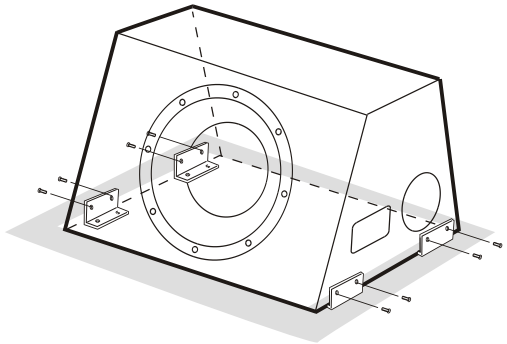
Do not adjust this input level to maximum unless your input level requires it.

Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.

Suggested mounting method #2

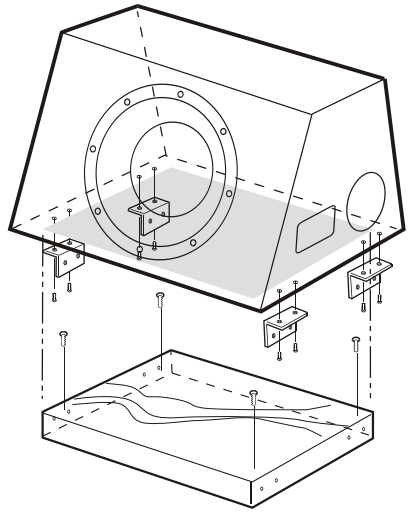


1. After marking footprint of enclosure well, attach bent metal plates (not included) to mounting surface in vehicle using self-tapping sheet metal screws.



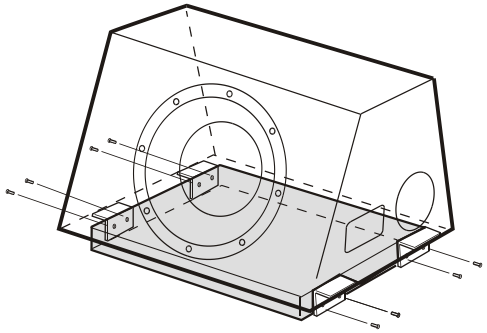
2. Attach metal plates (not included) to *sides* of enclosure using wood screws.

Suggested mounting method #3



1. Cut a rectangular pedestal of plywood about 1-1/2" to 2" smaller than the footprint of the enclosure. Turn over the enclosure and put the plywood in the center of the bottom and attach the bent metal brackets to the enclosure botton in suitable positions along the outside edge of the plywood.

Then use sheet metal screws to attach the plywood to the mounting surface.

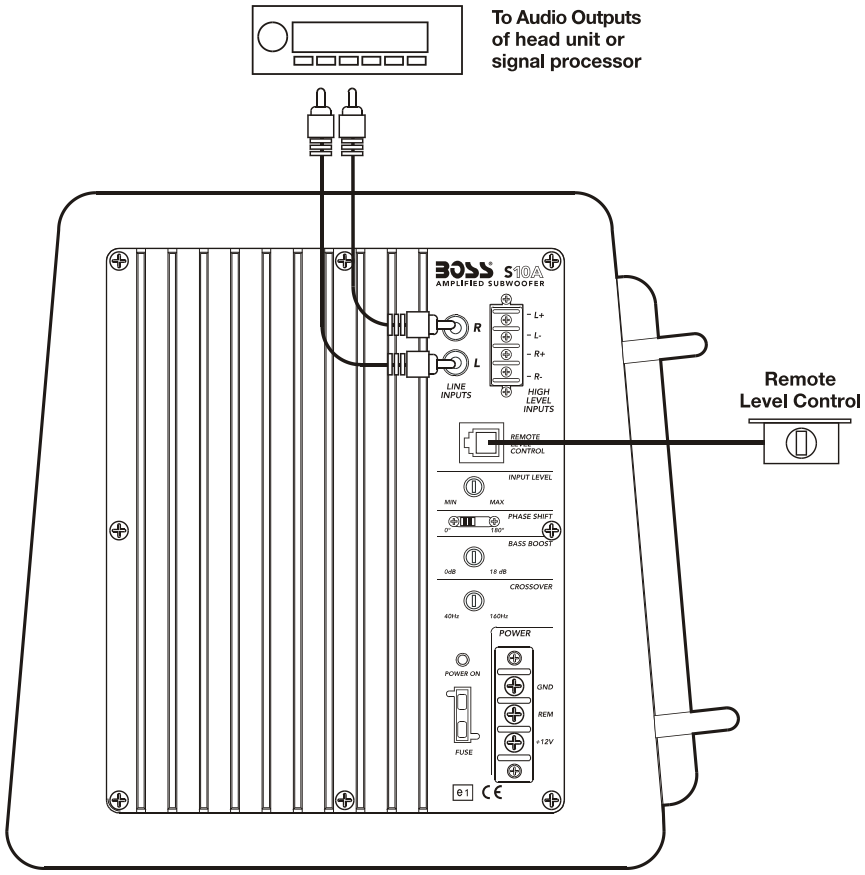


2. Attach metal plates (not included) to *sides of pedestal* using wood screws.

Low Level Input Wiring

Low-level (RCA) input wiring is preferred for best audio performance. Always use a high-quality RCA cable for best audio performance.

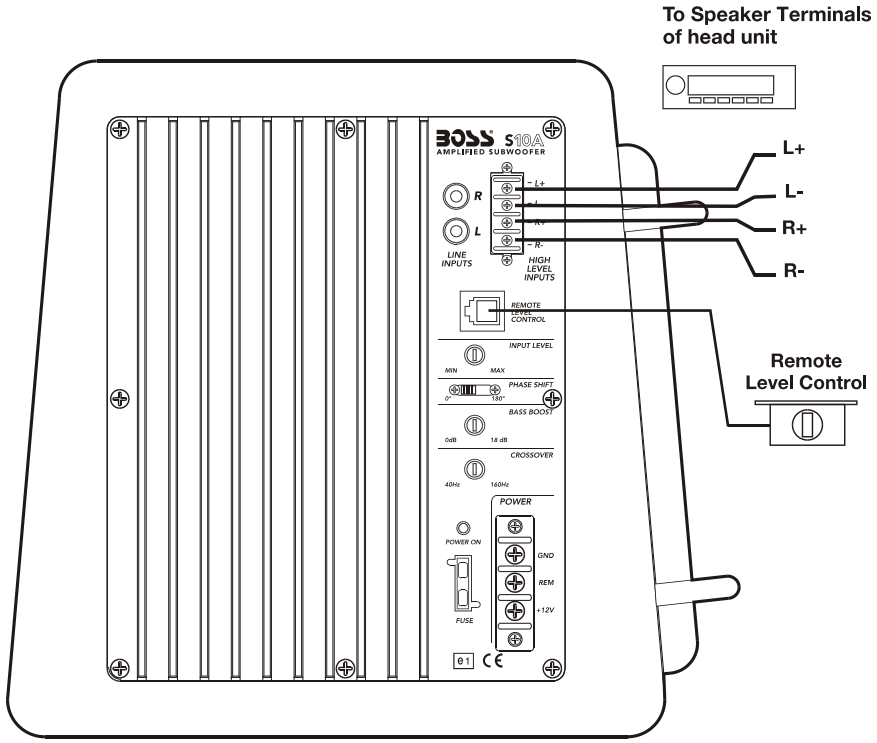
NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplified subwoofer at the same time!



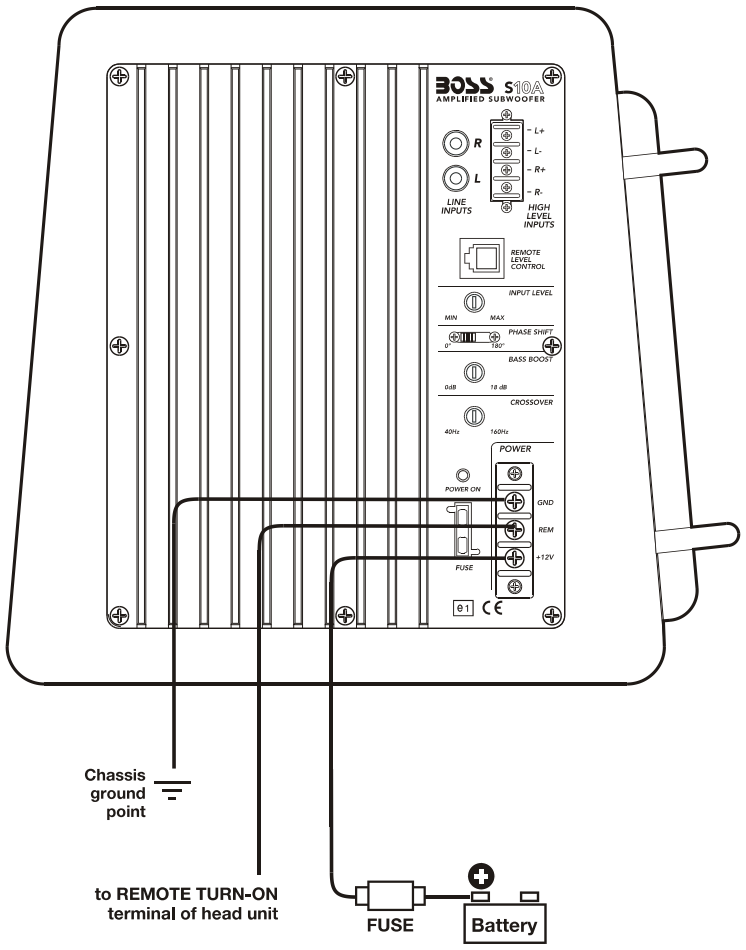
High Level Input Wiring

The high level input(s) should only be used when your head unit lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplified subwoofer at the same time!



Power Connections



Troubleshooting

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous pages. If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM	POSSIBLE REMEDY
Amplifier will not power up.	*Check to make sure you have a good ground connection.* *Check that the Remote Input (Turn-On) has at least 3VDC.* *Check that there is battery power on the (+) terminal.* *Check that there is at least 12v.* *Check all fuses, replace if necessary.* *Make sure that the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.*
LED becomes red (Protection mode) when amplifier is powered up.	*Turn down the volume control on the head unit to prevent overdriving.* *Reset the amplifier. If the LED still appears red, then the amplifier is faulty and needs servicing.*
No output.	*Check that all fuses are OK.* *Check that built-in amplifier is properly grounded.* *Check that the Remote Input (Turn-On) has at least 3VDC.* *Check that the RCA audio cables are plugged into the proper inputs.*
Low output.	*Reset the Level Control.* *Check the Crossover Control settings.*
Audio present in only one channel.	*Check the RCA interconnect cables. If used, check the high level input wires.*
High hiss in the speakers.	*Disconnect all RCA inputs to the amplifiers. If the hiss disappears, then plug in the component driving the amplifier and unplug its inputs. If the hiss disappears at this point, go on until the faulty/noisy component is found.* *It is best to set the amplifier's input level control as low as possible. The best subjective signal-to-noise ratio is achieved in this manner. Try to set the head unit as high as possible (without distortion) and the amp input level as low as possible.*
Squealing noise from speakers.	*Check for improperly grounded RCA interconnects.*
Distorted sound.	*Check that the Input Level Control is set to match the signal level of the head unit. Always try to set the Input Level as low as possible.* *Check that all crossover frequencies are properly set.* *Check for short circuits on the speaker leads.*
Amplifier gets very hot.	*Check that there is good air circulation around the amp panel. In some applications, it may be necessary to add external cooling fan(s).*
Engine noise (static type)	*This is usually caused by poor quality RCA cables,which can pick up radiated noise. Use only the best quality cables, and route them away from power cables.*
Engine noise (alternator whine)	*Check that the RCA grounds are not shorted to the vehicle chassis.* *Check that the head unit is properly grounded.*

Specifications

Amplifier Section	**S10A** *800W 10-Inch Amplified Subwoofer Enclosure*	**S12A** *1200W 12-Inch Amplified Subwoofer Enclosure*
RMS POWER	800W	1200W
MAX POWER	400W	600W
THD	0.01%	0.01%
Frequency response	40-200Hz	40-200Hz
Signal-to-noise ratio	103dB	103dB
Low pass crossover range	40Hz-160Hz	40Hz-160Hz
Bass boost	Selectable 0 / +18dB	Selectable 0 / +18dB
Fuse rating	20A	25A
Subwoofer Enclosure		
MAX POWER capacity	800W	1200W
Frequency response	20-200Hz	20-200Hz
Dimensions:	13”L x 12-13/16”H x 12-7/32”D (330L x 300H x 310D mm)	13-3/16”L x 13-3/4”H x 13”D (360L x 350H x 330D mm)

All specifications subject to change without notice.